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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,277	09/25/2003	Lyndon Chen	TET-PT046	6583

3624 7590 04/13/2007
VOLPE AND KOENIG, P.C.
UNITED PLAZA, SUITE 1600
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

EXAMINER

SINKANTARAKORN, PAWARIS

ART UNIT	PAPER NUMBER
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2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/671,277

Applicant(s)

CHEN ET AL.

Examiner

Pao Sinkantarakorn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-18 and 20 is/are rejected.
- 7) ☒ Claim(s) 10 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-9, 11-18, and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Renaud (US 2001/0022823) in view of Lockridge et al. (US 2004/0010729).

Renaud disclose, **regarding claim 1**, a method for synchronizing clocks of a first and a second nodes in a wireless local area network, comprising steps of:

asserting a request signal from said first node to said second node; asserting a responsive signal packet containing a time stamp in response to said request signal from said second node to said first node (see paragraph 27 lines 5-17, data is timestamped to denote the transmission time at the transmitter);

operating said time stamp and said local time value at said first node according to a control program to obtain a difference T (see paragraph 29 lines 19-23, paragraph 32 lines 2-10, paragraph 33 lines 7-16, the time stamp is being compared to the local clock to determine the difference between the timestamp and the time value of the local clock); and

adjusting at least one of said clocks of said first and said second nodes to synchronize said clocks of said first and said second nodes according to said difference T (see paragraph 33 lines 19-22);

Renaud does not disclose a method for tagging a local time value to said responsive signal packet at said first node. However, Lockridge et al. from the same or similar fields of endeavor disclose adding a time stamp to a data packet when the data

packet is received (see Figure 2 T2 and T3, paragraph 31, a local counter of a client device is sampled to generate a time stamp).

Thus, it would have been obvious to implement a method for adding a time stamp to a data packet when the data packet is received as taught by Lockridge et al. into the method for synchronizing a receiver's clock to a transmitter's clock of Renaud.

The motivation for implementing a method for adding a time stamp to a data packet when the data packet is received is that it provides a more reliable synchronizing system.

regarding claim 2, said first and said second nodes are a station and an access point, respectively (see paragraph 27 lines 5-8, a transmitter and a receiver).

regarding claim 3, said clock of said station is adjusted to synchronize with said clock of said access point according to said difference T (see paragraph 33 lines 19-22, clock 144 is located in the receiver);

regarding claim 4 and 5, said request signal is a probe-request signal asserted by said station and said responsive signal packet is a probe-response signal packet asserted by said access point (see paragraph 27 lines 5-17, in order for the transmitter to start transmitting, it has to receive a request signal from the receiver; in return, the transmitter transmits the timestamped data packet to the receiver) ;

regarding claim 6, said time stamp is a counting value C1 of a remote counter in said access point, which is generated when said responsive signal packet is asserted by said access point (see paragraph 27 lines 15-17);

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regarding claim 7, said local time value is a counting value C2 of a local counter in said station, which is generated when said responsive signal packet is received by said station (see paragraph 32 lines 2-10, a clock controller generates a time value when it detects that the data packet is received);

regarding claim 8, said difference T is equal to $C1 - C2$, and stored in a difference register in said station (see paragraph 33 lines 19-28, the comparator determines the difference and forwards the result to the clock controller, which is comprised of a processor).

regarding claim 9, said clock of said station is adjusted by adding said difference T to a new counting value of said local counter (see paragraph 33 lines 19-22);

regarding claim 11, for use between a first and a second stations, which serve as said first and said second nodes, respectively (see paragraph 27 lines 5-8, a transmitter and a receiver).

Claims 12-18 and 20 are rejected for the reason as claims 1-9 and 11 since claims 12-18 and 20 claim an apparatus carrying out the methods of claims 1-9 and 11.

Allowable Subject Matter

6. Claims 10 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kelly et al. (US 6,993,009), Rasanen (US 2002/0176446), and Behtash et al. (US 5,553,076) are cited to show methods/apparatus considered pertinent to the claimed invention.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pao Sinkantarakorn whose telephone number is 571-270-1424. The examiner can normally be reached on Monday-Thursday 9:00am-3:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PS



RICKY Q. NGO
SUPERVISORY PATENT EXAMINER